

January 31, 2012

APIRT
FEB 03 2012

Mr. Mike Wilson, P.E.
Director, Air Permits Division (MC-163)
Texas Commission on Environmental Quality
Office of Permitting, Remediation, and Registration
P.O. Box 13087
Austin, TX 78711-3087

AIR PERMITS DIVISION

FEB 03 2012

RECEIVED

AIR PERMITS DIVISION

~~FEB 02 2012~~

RECEIVED

Re: Air Permit Application
Sterile Processing Facility
American Contract Services, Inc.
CN: Not Yet Assigned
RN: Not Yet Assigned
Houston, Harris County, Texas

Dear Mr. Wilson:

American Contract Systems, Inc. is submitting the attached air permit application to authorize an increase annual ethylene oxide usage in a sterile processing facility currently authorized by Permit-By-Rule 106.417. The plant was designed to prepare and sterilize 'packs' of medical equipment. The sterilizer and packaging equipment is owned and operated by American Contract Systems, Inc. The Methodist Hospital owns the warehouse which houses the sterilizer and the property upon which the warehouse sits. A CORE Data Form is attached to this letter.

This amendment application was prepared in accordance with the guidance provided in the TCEQ's *Air Quality Permit Application Instructions, PI-1 Form*, and 30 TAC Chapter 116 regulations.

If you require any additional information or have any questions, please contact me at (952) 926-3515 or Mr. Larry Moon, P.E., of Zephyr Environmental Corporation at (512) 879-6619.

Sincerely,

American Contract Systems, Inc.


Philip J. Fleischhacker
VP of Sterilization

Attachments

cc: Mr. Manuel Bautista, Air Section Manager, TCEQ Region 12, Houston

APIRT
FEB 03 2012

Mr. Arturo J. Blanco, Bureau Chief of Pollution Control and Prevention, Environmental Health Division, City of Houston

Mr. Michael Schaffer, Director, Environmental Public Health Division, Harris County Public Health and Environmental Services

Mr. John Tolleson, The Methodist Hospital, Houston, TX

Dave Thompson, American Contract Systems, Bloomington, MN

Mr. Larry A. Moon, P.E., Zephyr Environmental Corporation, Austin, TX

Attachments



**APPLICATION FOR AN AIR QUALITY PERMIT
FOR A STERILE PROCESSING PLANT**

HARRIS COUNTY, TEXAS

SUBMITTED TO:
**TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
OFFICE OF PERMITTING, REMEDIATION, AND REGISTRATION
AIR PERMITS DIVISION
P. O. Box 13087
AUSTIN, TEXAS 78711-3087**

SUBMITTED BY:
**AMERICAN CONTRACT SYSTEMS, INC.
4801 WEST 81ST STREET, SUITE 110
BLOOMINGTON, MINNESOTA 55437**

PREPARED BY:
**ZEPHYR ENVIRONMENTAL CORPORATION
2600 VIA FORTUNA, SUITE 450
AUSTIN, TEXAS 78746**

FEBRUARY 2012



F-102
Larry A. Moon



AIR QUALITY PERMIT APPLICATION FOR STERILE PROCESSING FACILITY
AMERICAN CONTRACT SYSTEMS

TABLE OF CONTENTS

INTRODUCTION	1
FORM PI-1 GENERAL APPLICATION	2
VII. TECHNICAL INFORMATION.....	11
VII.A.1 AREA MAP.....	12
VII.A.2 PLOT PLAN.....	13
VII. A.3 EXISTING AUTHORIZATIONS	14
VII.A.4 PROCESS FLOW DIAGRAM	15
VII.A.5. PROCESS DESCRIPTION.....	16
VII.A.6 EMISSIONS DATA AND CALCULATIONS.....	17
VII.A.7 TCEQ TABLES.....	18
VII.E. DISASTER REVIEW	22
VIII. STATE REGULATORY REQUIREMENTS	35
VIII.A. COMPLIANCE WITH TCEQ RULES AND REGULATIONS	35
1.1 30 TAC Chapter 101, General Air Quality Rules	35
1.2 30 TAC Chapter 111 - Control of Air Pollution from Visible Emissions and Particulate Matter	35
1.3 30 TAC Chapter 112 - Control of Air Pollution from Sulfur Compounds.....	35
1.4 30 TAC Chapter 113 - Control of Air Pollution from Toxic Materials	35
1.5 30 TAC Chapter 114 - Control of Air Pollution from Motor Vehicles	36
1.6 30 TAC Chapter 115 - Control of Air Pollution from Volatile Organic Compounds.....	36
1.7 30 TAC Chapter 116 - Control of Air Pollution by Permits for New Construction or Modification.....	36
1.8 30 TAC Chapter 117 - Control of Air Pollution from Nitrogen Compounds	38
1.9 30 TAC Chapter 118 - Control of Air Pollution Episodes	38
1.10 30 TAC Chapter 122 - Federal Operating Permits	38
VIII.B. MEASUREMENT OF EMISSIONS	39
VIII.C. BEST AVAILABLE CONTROL TECHNOLOGY (BACT).....	40
VIII.D. PERFORMANCE DEMONSTRATION	42
IX. FEDERAL REGULATORY REQUIREMENTS	43
IX.A. NEW SOURCE PERFORMANCE STANDARDS	43

**AIR QUALITY PERMIT APPLICATION FOR STERILE PROCESSING FACILITY
AMERICAN CONTRACT SYSTEMS**

IX.B. NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS.....	44
IX.C. MAXIMUM ACHIEVABLE CONTROL TECHNOLOGIES FOR NESHAP SOURCE CATEGORIES.....	45
IX.D. NONATTAINMENT PERMITTING REQUIREMENTS	46
IX.E. PREVENTION OF SIGNIFICANT DETERIORATION PERMITTING REQUIREMENTS..	47
XI. PERMIT FEE INFORMATION	48

APPENDICES

APPENDIX A: EMISSION CALCULATIONS
APPENDIX B: BACT SUPPORT DOCUMENTS

AIR QUALITY PERMIT APPLICATION FOR STERILE PROCESSING FACILITY
AMERICAN CONTRACT SYSTEMS

INTRODUCTION

**AIR QUALITY PERMIT APPLICATION FOR STERILE PROCESSING FACILITY
AMERICAN CONTRACT SYSTEMS**

INTRODUCTION

A sterile processing plant located in Houston, Harris County, Texas is authorized under Texas Commission on Environmental Quality (TCEQ) Permit-By-Rule 106.417. The plant was designed to prepare and sterilize 'packs' of medical equipment and supplies primarily for use in The Methodist Hospital system and also for customers outside the Methodist Hospital system. The sterilizer and packaging equipment is owned and operated by American Contract Systems. The Methodist Hospital owns the warehouse which houses the sterilizer and the property upon which the warehouse sits. The customer base has grown such that it is necessary to obtain authorization to use ethylene oxide in excess of the 1,000 pound annual usage limit in PBR 106.417.

American Contract Systems (ACS) is submitting this air permit application to authorize the additional use of ethylene oxide in the existing sterile processing plant. There is no proposed new equipment or modification of existing equipment in this application. Emissions of ethylene oxide are controlled by dry bed scrubbers on each stack which provide a 99% control efficiency.

The remainder of this application presents all information required for an air quality construction permit according to the TCEQ's Form PI-1, with information presented in the order that it is addressed on the PI-1 Form.

AIR QUALITY PERMIT APPLICATION FOR STERILE PROCESSING FACILITY
AMERICAN CONTRACT SYSTEMS

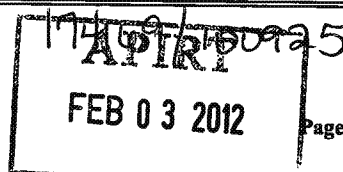
FORM PI-1 AND APPLICANT INFORMATION



Texas Commission on Environmental Quality
Form PI-1 General Application for
Air Preconstruction Permit and Amendment

Important Note: The agency **requires** that a Core Data Form be submitted on all incoming applications unless a Regulated Entity and Customer Reference Number have been issued *and* no core data information has changed. For more information regarding the Core Data Form, call (512) 239-5175 or go to www.tceq.texas.gov/permitting/central_registry/guidance.html.

I. Applicant Information		
A. Company or Other Legal Name: American Contract Systems, Inc		
Texas Secretary of State Charter/Registration Number (<i>if applicable</i>):		
B. Company Official Contact Name: Philip J. Fleischhacker		
Title: VP of Sterilization		
Mailing Address: 4801 West 81st Street, Suite 110		
City: Bloomington	State: MN	ZIP Code: 55437
Telephone No.: 952-926-3515	Fax No.: 952-926-2073	E-mail Address: pfleischhacker@amconsys.com
C. Technical Contact Name: Philip J. Fleischhacker		
Title: VP of Sterilization		
Company Name: American Contract Systems		
Mailing Address: 4801 West 81st Street, Suite 110		
City: Bloomington	State: MN	ZIP Code: 55437
Telephone No.: 952-926-3515	Fax No.: 952-926-2073	E-mail Address: pfleischhacker@amconsys.com
D. Site Name: Distribution Warehouse Sterilizer		
E. Area Name/Type of Facility: EO Sterilizer		<input checked="" type="checkbox"/> Permanent <input type="checkbox"/> Portable
F. Principal Company Product or Business: Ethylene oxide sterilization		
Principal Standard Industrial Classification Code (SIC): 7389		
Principal North American Industry Classification System (NAICS): 561910		
G. Projected Start of Construction Date: Existing site		
Projected Start of Operation Date: Existing site		
H. Facility and Site Location Information (If no street address, provide clear driving directions to the site in writing.):		
Street Address: 7702 Parnell Street		
City/Town: Houston	County: Harris	ZIP Code: 77021
Latitude (nearest second): 29° 40' 47"		Longitude (nearest second): 95° 22' 33"





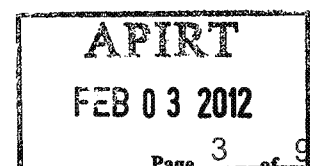
Texas Commission on Environmental Quality
Form PI-1 General Application for
Air Preconstruction Permit and Amendment

I. Applicant Information (continued)	
I. Account Identification Number (leave blank if new site or facility):	
J. Core Data Form.	
Is the Core Data Form (Form 10400) attached? If <i>No</i> , provide customer reference number and regulated entity number (complete K and L).	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
K. Customer Reference Number (CN):	
L. Regulated Entity Number (RN):	
II. General Information	
A. Is confidential information submitted with this application? If <i>Yes</i> , mark each confidential page confidential in large red letters at the bottom of each page.	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
B. Is this application in response to an investigation or enforcement action? If <i>Yes</i> , attach a copy of any correspondence from the agency.	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
C. Number of New Jobs: 0	
D. Provide the name of the State Senator and State Representative and district numbers for this facility site:	
Senator: Rodney Ellis	District No.: 13
Representative: Borris L. Miles	District No.: 146
III. Type of Permit Action Requested	
A. Mark the appropriate box indicating what type of action is requested.	
Initial <input checked="" type="checkbox"/> Amendment <input type="checkbox"/> Revision (30 TAC 116.116(e)) <input type="checkbox"/> Change of Location <input type="checkbox"/> Relocation <input type="checkbox"/>	
B. Permit Number (if existing):	
C. Permit Type: Mark the appropriate box indicating what type of permit is requested. (<i>check all that apply, skip for change of location</i>)	
Construction <input checked="" type="checkbox"/> Flexible <input type="checkbox"/> Multiple Plant <input type="checkbox"/> Nonattainment <input type="checkbox"/> Prevention of Significant Deterioration <input type="checkbox"/>	
Hazardous Air Pollutant Major Source <input type="checkbox"/> Plant-Wide Applicability Limit <input type="checkbox"/>	
Other: _____	
D. Is a permit renewal application being submitted in conjunction with this amendment in accordance with 30 TAC 116.315(c).	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO



**Texas Commission on Environmental Quality
Form PI-1 General Application for
Air Preconstruction Permit and Amendment**

III. Type of Permit Action Requested (continued)		
E. Is this application for a change of location of previously permitted facilities? If Yes, complete III.E.1 - III.E.4.		<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
1. Current Location of Facility (If no street address, provide clear driving directions to the site in writing.):		
Street Address:		
City:	County:	ZIP Code:
2. Proposed Location of Facility (If no street address, provide clear driving directions to the site in writing.):		
Street Address:		
City:	County:	ZIP Code:
3. Will the proposed facility, site, and plot plan meet all current technical requirements of the permit special conditions? If No, attach detailed information.		<input type="checkbox"/> YES <input type="checkbox"/> NO
4. Is the site where the facility is moving considered a major source of criteria pollutants or HAPs?		<input type="checkbox"/> YES <input type="checkbox"/> NO
F. Consolidation into this Permit: List any standard permits, exemptions or permits by rule to be consolidated into this permit including those for planned maintenance, startup, and shutdown.		
List: 95413		
G. Are you permitting planned maintenance, startup, and shutdown emissions? If Yes, attach information on any changes to emissions under this application as specified in VII and VIII.		<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
H. Federal Operating Permit Requirements (30 TAC Chapter 122 Applicability)		
Is this facility located at a site required to obtain a federal operating permit? If Yes, list all associated permit number(s), attach pages as needed).		<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> To be determined
Associated Permit No (s.):		
1. Identify the requirements of 30 TAC Chapter 122 that will be triggered if this application is approved.		
FOP Significant Revision <input type="checkbox"/> FOP Minor <input type="checkbox"/> Application for an FOP Revision <input type="checkbox"/> To Be Determined <input type="checkbox"/>		
Operational Flexibility/Off-Permit Notification <input type="checkbox"/> Streamlined Revision for GOP <input type="checkbox"/> None <input checked="" type="checkbox"/>		





Texas Commission on Environmental Quality
Form PI-1 General Application for
Air Preconstruction Permit and Amendment

III. Type of Permit Action Requested (continued)

H. Federal Operating Permit Requirements (30 TAC Chapter 122 Applicability) (continued)

2. Identify the type(s) of FOP(s) issued and/or FOP application(s) submitted/pending for the site. (check all that apply)

GOP Issued ☐

GOP application/revision application: submitted or under APD review ☐

SOP Issued ☐

SOP application/revision application submitted or under APD review ☐

IV. Public Notice Applicability

A. Is this a new permit application or a change of location application? ☒ YES ☐ NO

B. Is this application for a concrete batch plant? If Yes, complete V.C.1 – V.C.2. ☐ YES ☒ NO

C. Is this an application for a major modification of a PSD, nonattainment, FCAA 112(g) permit, or exceedance of a PAL permit? ☐ YES ☒ NO

D. Is this application for a PSD or major modification of a PSD located within 100 kilometers of an affected state? ☐ YES ☒ NO

If Yes, list the affected state(s).

E. Is this a state permit amendment application? If Yes, complete IV.E.1. – IV.E.3.

1. Is there any change in character of emissions in this application? ☐ YES ☐ NO

2. Is there a new air contaminant in this application? ☐ YES ☐ NO

3. Do the facilities handle, load, unload, dry, manufacture, or process grain, seed, legumes, or vegetables fibers (agricultural facilities)? ☐ YES ☐ NO

F. List the total annual emission increases associated with the application (list all that apply and attach additional sheets as needed):

Volatile Organic Compounds (VOC): 0.02 tons

Sulfur Dioxide (SO₂):

Carbon Monoxide (CO):

Nitrogen Oxides (NO_x):

Particulate Matter (PM):

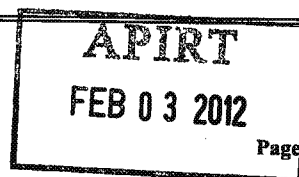
PM₁₀ microns or less (PM₁₀):

PM_{2.5} microns or less (PM_{2.5}):

Lead (Pb):

Hazardous Air Pollutants (HAPs):

Other speciated air contaminants not listed above:



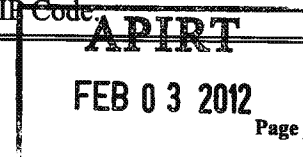


**Texas Commission on Environmental Quality
Form PI-1 General Application for
Air Preconstruction Permit and Amendment**

V. Public Notice Information (complete if applicable)		
A. Public Notice Contact Name: John E. Tolleson		
Title: Director, Real Estate Services		
Mailing Address: 6550 Fannin, Suite 201		
City: Houston	State: TX	ZIP Code: 77030
B. Name of the Public Place: TCEQ Region 12 Field Office		
Physical Address (No P.O. Boxes): 5425 Polk St., Ste. H		
City: Houston	County: Harris	ZIP Code: 77023
The public place has granted authorization to place the application for public viewing and copying.		<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
The public place has internet access available for the public.		<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
C. Concrete Batch Plants, PSD, and Nonattainment Permits		
1. County Judge Information (For Concrete Batch Plants and PSD and/or Nonattainment Permits) for this facility site.		
The Honorable:		
Mailing Address:		
City:	State:	ZIP Code:
2. Is the facility located in a municipality or an extraterritorial jurisdiction of a municipality? (For Concrete Batch Plants)		<input type="checkbox"/> YES <input type="checkbox"/> NO
Presiding Officers Name(s):		
Title:		
Mailing Address:		
City:	State:	ZIP Code:
3. Provide the name, mailing address of the chief executives of the city and county, Federal Land Manager, or Indian Governing Body for the location where the facility is or will be located.		
Chief Executive:		
Mailing Address:		
City:	State:	ZIP Code:
Name of the Federal Land Manager:		
Title:		
Mailing Address:		
City:	State:	ZIP Code:

TCEQ - 10252 (Revised 10/11) PI-1 Form

This form is for use by facilities subject to air quality permit requirements and may be revised periodically. (APDG 5171v16)





**Texas Commission on Environmental Quality
Form PI-1 General Application for
Air Preconstruction Permit and Amendment**

V. Public Notice Information (complete if applicable) (continued)

3. Provide the name, mailing address of the chief executives of the city and county, State, Federal Land Manager, or Indian Governing Body for the location where the facility is or will be located. *(continued)*

Name of the Indian Governing Body:

Title:

Mailing Address:

City:

State:

ZIP Code:

D. Bilingual Notice

Is a bilingual program **required** by the Texas Education Code in the School District? ☒ YES ☐ NO

Are the children who attend either the elementary school or the middle school closest to your facility eligible to be enrolled in a bilingual program provided by the district? ☒ YES ☐ NO

If *Yes*, list which languages are required by the bilingual program?

Spanish

VI. Small Business Classification (Required)

A. Does this company (including parent companies and subsidiary companies) have fewer than 100 employees or less than \$6 million in annual gross receipts? ☐ YES ☒ NO

B. Is the site a major stationary source for federal air quality permitting? ☐ YES ☒ NO

C. Are the site emissions of any regulated air pollutant greater than or equal to 50 tpy? ☐ YES ☒ NO

D. Are the site emissions of all regulated air pollutants combined less than 75 tpy? ☐ YES ☒ NO

VII. Technical Information

A. The following information must be submitted with your Form PI-1 (this is just a checklist to make sure you have included everything)

1. Current Area Map ☒

2. Plot Plan ☒

3. Existing Authorizations ☒

4. Process Flow Diagram ☒

5. Process Description ☒

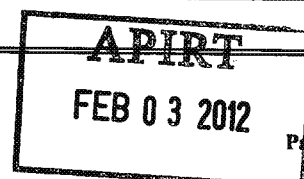
6. Maximum Emissions Data and Calculations ☒

7. Air Permit Application Tables ☒

a. Table 1(a) (Form 10153) entitled, Emission Point Summary ☒

b. Table 2 (Form 10155) entitled, Material Balance ☒

c. Other equipment, process or control device tables ☒





Texas Commission on Environmental Quality
Form PI-1 General Application for
Air Preconstruction Permit and Amendment

VII. Technical Information			
B. Are any schools located within 3,000 feet of this facility?			<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
C. Maximum Operating Schedule:			
Hours: 24	Day(s): 7	Week(s): 52	Year(s):
Seasonal Operation? If Yes, please describe in the space provide below.			<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
D. Have the planned MSS emissions been previously submitted as part of an emissions inventory?			<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
Provide a list of each planned MSS facility or related activity and indicate which years the MSS activities have been included in the emissions inventories. Attach pages as needed.			
E. Does this application involve any air contaminants for which a <i>disaster review</i> is required?			<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
F. Does this application include a pollutant of concern on the <i>Air Pollutant Watch List (APWL)</i> ?			<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
VIII. State Regulatory Requirements Applicants must demonstrate compliance with all applicable state regulations to obtain a permit or amendment. The application must contain detailed attachments addressing applicability or non applicability; identify state regulations; show how requirements are met; and include compliance demonstrations.			
A. Will the emissions from the proposed facility protect public health and welfare, and comply with all rules and regulations of the TCEQ?			<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
B. Will emissions of significant air contaminants from the facility be measured?			<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
C. Is the Best Available Control Technology (BACT) demonstration attached?			<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
D. Will the proposed facilities achieve the performance represented in the permit application as demonstrated through recordkeeping, monitoring, stack testing, or other applicable methods?			<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
IX. Federal Regulatory Requirements Applicants must demonstrate compliance with all applicable federal regulations to obtain a permit or amendment. The application must contain detailed attachments addressing applicability or non applicability; identify federal regulation subparts; show how requirements are met; and include compliance demonstrations.			
A. Does Title 40 Code of Federal Regulations Part 60, (40 CFR Part 60) New Source Performance Standard (NSPS) apply to a facility in this application?			<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
B. Does 40 CFR Part 61, National Emissions Standard for Hazardous Air Pollutants (NESHAP) apply to a facility in this application?			<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
C. Does 40 CFR Part 63, Maximum Achievable Control Technology (MACT) standard apply to a facility in this application?			<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO





**Texas Commission on Environmental Quality
Form PI-1 General Application for
Air Preconstruction Permit and Amendment**

IX. Federal Regulatory Requirements

Applicants must demonstrate compliance with all applicable federal regulations to obtain a permit or amendment. The application must contain detailed attachments addressing applicability or non applicability; identify federal regulation subparts; show how requirements are met; and include compliance demonstrations.

- | | |
|--|---|
| D. Do nonattainment permitting requirements apply to this application? | <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO |
| E. Do prevention of significant deterioration permitting requirements apply to this application? | <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO |
| F. Do Hazardous Air Pollutant Major Source [FCAA 112(g)] requirements apply to this application? | <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO |
| G. Is a Plant-wide Applicability Limit permit being requested? | <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO |

X. Professional Engineer (P.E.) Seal

Is the estimated capital cost of the project greater than \$2 million dollars?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
--	---

If Yes, submit the application under the seal of a Texas licensed P.E.

XI. Permit Fee Information

Check, Money Order, Transaction Number ,ePay Voucher Number:	Fee Amount: \$ 900
Company name on check:	Paid online?: <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
Is a copy of the check or money order attached to the original submittal of this application?	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A
Is a Table 30 (Form 10196) entitled, Estimated Capital Cost and Fee Verification, attached?	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A





**Texas Commission on Environmental Quality
Form PI-1 General Application for
Air Preconstruction Permit and Amendment**

XII. Delinquent Fees and Penalties

This form **will not be processed** until all delinquent fees and/or penalties owed to the TCEQ or the Office of the Attorney General on behalf of the TCEQ is paid in accordance with the Delinquent Fee and Penalty Protocol. For more information regarding Delinquent Fees and Penalties, go to the TCEQ Web site at: www.tceq.texas.gov/agency/delin/index.html.

XIII. Signature

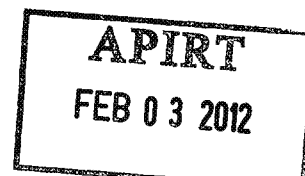
The signature below confirms that I have knowledge of the facts included in this application and that these facts are true and correct to the best of my knowledge and belief. I further state that to the best of my knowledge and belief, the project for which application is made will not in any way violate any provision of the Texas Water Code (TWC), Chapter 7, Texas Clean Air Act (TCAA), as amended, or any of the air quality rules and regulations of the Texas Commission on Environmental Quality or any local governmental ordinance or resolution enacted pursuant to the TCAA. I further state that I understand my signature indicates that this application meets all applicable nonattainment, prevention of significant deterioration, or major source of hazardous air pollutant permitting requirements. The signature further signifies awareness that intentionally or knowingly making or causing to be made false material statements or representations in the application is a criminal offense subject to criminal penalties.

Name: PHILIP FLEISCHWACKER

Signature: 

Original Signature Required

Date: 2/01/12



AIR QUALITY PERMIT APPLICATION FOR STERILE PROCESSING FACILITY
AMERICAN CONTRACT SYSTEMS

TECHNICAL INFORMATION

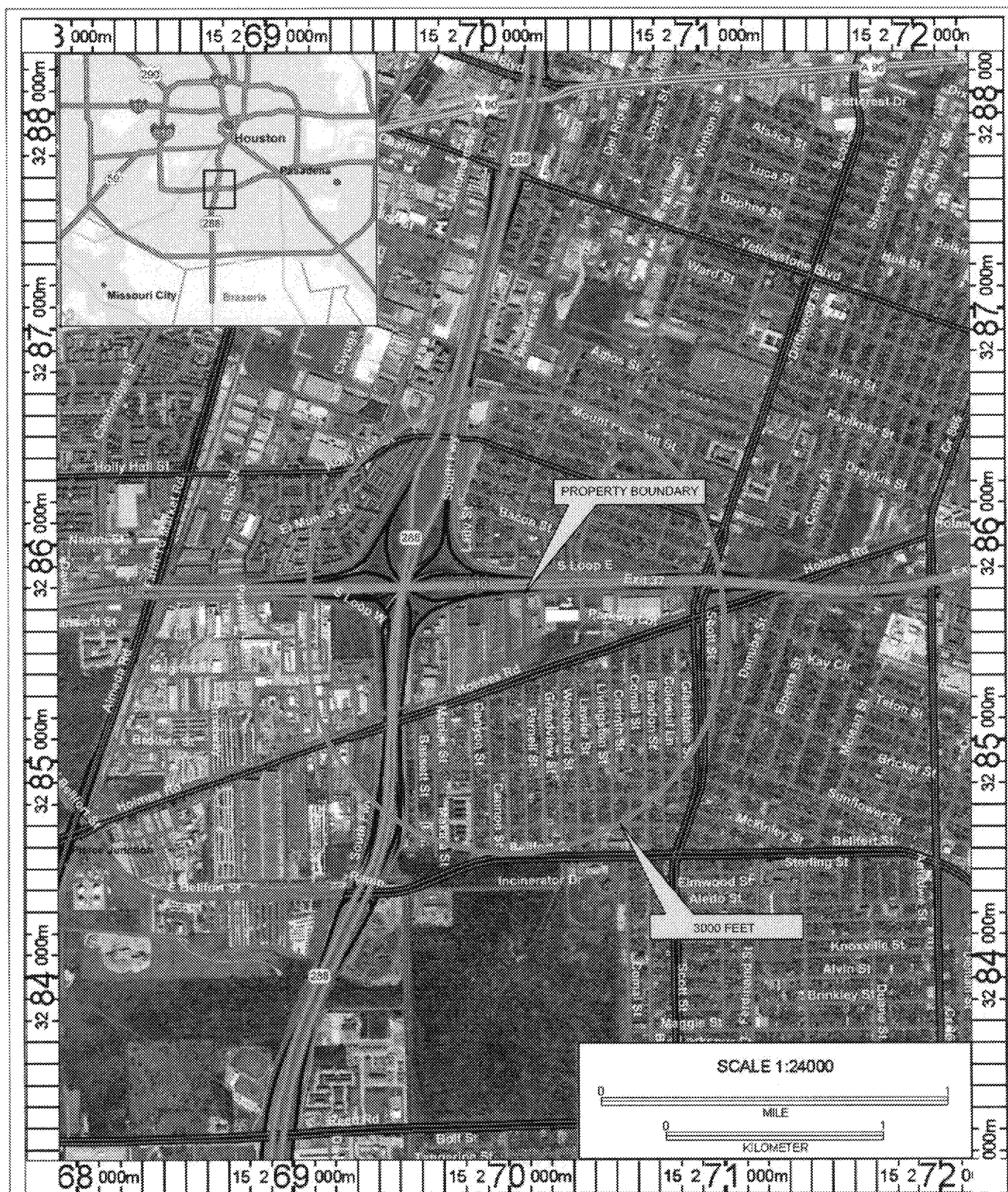
Zephyr Environmental Corporation

011337

ED_005146_00002671-00018

VII. TECHNICAL INFORMATION
A.1. Area Map and A.2. Plot Plans

An area map is provided with a USGS underlay that shows the surrounding land use, the location of the nearest residence, and a 3,000 foot radius around the site property line. The attached plot plan shows the scale, a north arrow, two benchmarks, and emission points associated with the facility.



Datum: NAD83

Copyright (C) 2009, MyTope, Inc.



Digital USGS AERIAL PHOTOGRAPH
—Bellaire SE, TX (January 14, 2009)
MAP SOURCE: Terrain Navigator Pro



SITE
LOCATION



AREA MAP
STERILE PROCESSING CENTER
THE METHODIST HOSPITAL
Houston, Texas

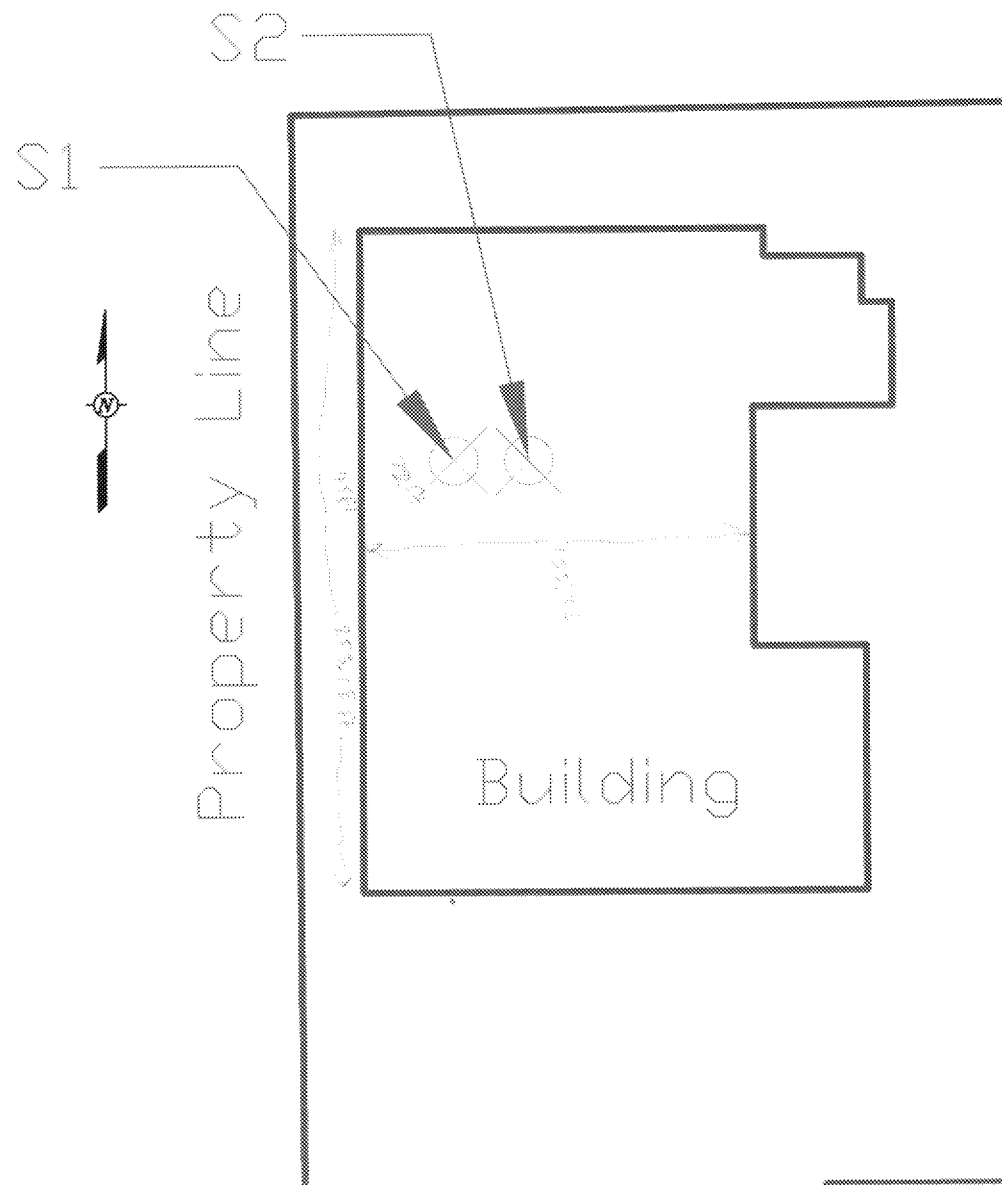
File Name: H:\Methodist Hospital\011000\Area Map

Designed By:
R. von Czoernig

Reviewed By:
L. Moon

Project No:
011000

Date:
2/25/2011



Methodist Hospital
Parnell Warehouse
Sterile Processing Plant

Plot Plan

Purpose: NSR Permit Application

Area Map.dwg



Designed By:
K. Ellis

Checked By:

Project No.
07173.018

Date:
12/20/2011

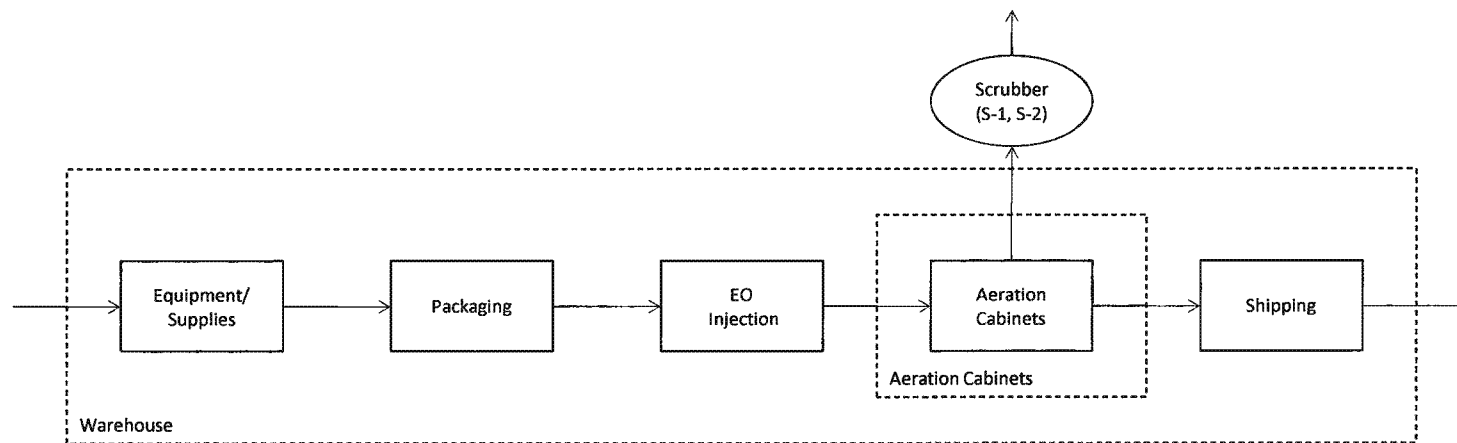
Sheet:
1 of 1

VII. A.3 EXISTING AUTHORIZATIONS

The existing authorization for the sterile processing plant is PBR 106.417 with an effective date of September 4, 2000. The PBR is currently associated with RN103763884 – Parnell Warehouse. We are submitting a CORE Data Form with this application so that a separate regulated entity number can be generated for the sterile processing plant.

95413

Process Flow Diagram
Sterile Processing Plant
American Contract Systems



VII.A.5. PROCESS DESCRIPTION

The sterile processing plant is tasked with preparing and sterilizing 'packs' of medical equipment and supplies. The equipment and supplies are retrieved from storage, organized within the 'pack', and then charged with a pre-programmed amount of ethylene oxide. Each bag is tested for integrity via a vacuum check at the time that it is filled. If the bag fails the vacuum test, it is discarded. In addition, any leak in the injection equipment housing immediately locks-out the unit until the issue is resolved.

The charged packs are then placed in aeration cabinets for several days. Some ethylene oxide is reacted in the pack while the remaining ethylene oxide diffuses through the permeable package wall into the cabinet. The cabinet is under negative pressure and the ethylene oxide exiting the pack will be pulled through a vent system to one of two dry bed scrubbers. There are six aeration chambers, with three chambers vented to each scrubber.

The dry bed scrubbers are at least 99% effective in removing the ethylene oxide from the effluent stream and will exhaust vertically from the building (EPN S-1 and EPN S-2). After the designated aeration period has passed, the packs are removed from the cabinet and shipped to their destination.

Ethylene oxide is brought onsite in pressurized cylinders. A maximum of 240 pounds of ethylene oxide will be kept onsite at any time.

A process flow diagram is included as Figure VII.A.4 and a TCEQ Material Balance Table 2 is included in Section VII.A.7.

VII.A.6 EMISSIONS DATA AND CALCULATIONS

Since the sterilization process is a batch process, maximum hourly emissions of ethylene oxide are calculated based on the manufacturer's represented maximum stack outlet ethylene oxide concentration of 15 parts per million by volume (ppmv) times the maximum stack exhaust flow of 1,563 standard cubic feet per minute (scfm) for each stack. The stack exhaust flow is estimated based on the fan capacities.

Annual ethylene oxide emissions are based on the represented annual usage of 3,000 pounds per year and the 99% control efficiency of the dry bed scrubbers.

VII.A.7 TCEQ TABLES

A TCEQ Table 1(a) (Emission Point Summary), Table 2 (Material Balance), and other TCEQ equipment and control device tables follow.

**Table 1(a) Emission Point Summary**Page 2 of 2

VIII.E TECHNICAL INFORMATION

MATERIAL BALANCE

This material balance table is used to quantify possible emissions of air contaminants and special emphasis should be placed on potential air contaminants, for example: If feed contains sulfur, show distribution to all products. Please relate each material (or group of materials) listed to its respective location in the process flow diagram by assigning point numbers (taken from the flow diagram) to each material.

LIST EVERY MATERIAL INVOLVED IN EACH OF THE FOLLOWING GROUPS	Point No. from Flow Diagram	Process Rate (lbs/hr or SCFM) standard conditions: 70 F 14.7 psia. Check appropriate column at right for each process.	Meas.	Est.	Calc.
1. Raw Materials - Input EO		3,000 lbs/yr	X		
2. Fuels - Input					
3. Products and By-products - Output					
4. Solid Wastes and By-products - Output					
5. Liquids - Output					
6. Airborne Waste (Solid) - Output					
7. Airborne Wastes (gaseous) - Output Refer to Table 1(a).					X

VII.E. DISASTER REVIEW

Ethylene oxide is not included in the list of chemicals in the TCEQ Disaster Review Fact Sheet. Ethylene oxide is brought onsite in pressurized cylinders. A maximum of 240 pounds of ethylene oxide will be kept onsite at any time. A disaster review is not required for this project.

AIR QUALITY PERMIT APPLICATION FOR STERILE PROCESSING FACILITY
AMERICAN CONTRACT SYSTEMS

STATE REGULATORY REQUIREMENTS

VIII. STATE REGULATORY REQUIREMENTS

VIII.A. COMPLIANCE WITH TCEQ RULES AND REGULATIONS

This section addresses the assurance of regulatory compliance for the ACS application. As outlined in the following evaluation, the facilities covered by this application comply with all rules and regulations of the TCEQ, with the TCAA and with the provisions of the existing permit.

1.1 30 TAC Chapter 101, General Air Quality Rules

ACS will operate in accordance with the General Rules as they relate to circumvention, nuisance, traffic hazard, notification requirements for major upset, notification requirements for maintenance, sampling, sampling ports, emissions inventory requirements, sampling procedures and terminology, compliance with Environmental Protection Agency standards, the national and secondary air quality standards, inspection fees, emissions fee, and all other applicable General Rules.

1.2 30 TAC Chapter 111 - Control of Air Pollution from Visible Emissions and Particulate Matter

ACS will comply with all applicable requirements under Chapter 111. Opacity from the two stacks will not exceed the 20% opacity limit in Rule 111.111(a)(1)(B). Since the facility is located within Beltway 8 Loop in Harris County, the requirements of §111.141 to §111.149 apply to this location. However, there are no dusty materials handled at the site; there is no new construction or demolition proposed in this application; and the parking areas and roads at the site are paved.

1.3 30 TAC Chapter 112 - Control of Air Pollution from Sulfur Compounds

There are no SO₂ emissions proposed in this application.

1.4 30 TAC Chapter 113 - Control of Air Pollution from Toxic Materials

This Chapter incorporates National Emission Standards for Hazardous Air Pollutants (40 CFR Part 61) and Maximum Achievable Control Technology Standards (40 CFR Part 63). There are no National Emission Standards for Hazardous Air Pollutants (40 CFR Part 61) applicable to the sterile processing plant.

The sterile processing plant is subject to the area source requirements of MACT Subpart O, Ethylene Oxide Emissions Standards for Sterilization Facilities. Once the plant uses one ton or more of ethylene oxide in a consecutive 12-month period, the plant will be subject to the

**AIR QUALITY PERMIT APPLICATION FOR STERILE PROCESSING FACILITY
AMERICAN CONTRACT SYSTEMS**

applicable emission standards of 40 CFR §63.362, which requires 99% emission reduction from the sterilization chamber vent and no control for the aeration room vent. The sterilization for this process occurs inside permeable bags and the bags are placed inside aeration cabinets. The aeration cabinets are under negative pressure and the ethylene oxide exiting the bag will be pulled through a vent system to one of two dry bed scrubbers which provide a 99% emissions reduction. Since there is not a sterilization "chamber" in this process, it is not clear whether 99% control requirement in 40 CFR §63.362 and the associated testing and monitoring requirements apply.

The sterilization plant is not subject to MACT WWWW, National Emission Standards for Hospital Ethylene Oxide Sterilizers, because it is not located at a hospital.

1.5 30 TAC Chapter 114 - Control of Air Pollution from Motor Vehicles

Chapter 114 does not apply to facilities included in this permit application.

1.6 30 TAC Chapter 115 - Control of Air Pollution from Volatile Organic Compounds

The ethylene oxide pressurized containers are not subject to the requirements of Chapter 115, Subchapter B, Division 1: Storage of VOCs because the storage containers have a capacity of no more than 1000 gallons (115.117(a)(8));

The scrubber stacks are not subject to the requirements of Chapter 115, Subchapter B, Division 2, Vent Gas Control, because the combined weight of volatile organic compounds from each stack are less than 100 pounds in any continuous 24-hr period [115.127(a)(2)(A)].

1.7 30 TAC Chapter 116 - Control of Air Pollution by Permits for New Construction or Modification

§116.111(a)(1) – *PI-1 Form, General Application* – This application provides complete information required by the TCEQ's Form PI-1, General Application Form. As such, the completed form, signed by an authorized ACS representative, is included. All additional support information specified on the form is provided as part of this application.

§116.111(a)(2)(A) – *Demonstration of Compliance with TCEQ Rules and Regulations and Protection of Public Health and Welfare* – The emissions from the Plant will comply with all rules and regulations of the TCEQ and with the intent of the Texas Clean Air Act. There are no schools within 3,000 feet of the ACS Plant.

AIR QUALITY PERMIT APPLICATION FOR STERILE PROCESSING FACILITY
AMERICAN CONTRACT SYSTEMS

§116.111(a)(2)(B) – *Measurement of Emissions* – ACS has installed sampling ports in accordance with guidelines in the "Texas Commission on Environmental Quality (TCEQ) Sampling Procedures Manual" as required by the TCEQ.

§116.111(a)(2)(C) – *Best Available Control Technology (BACT)* – As demonstrated in this application, ACS will use Best Available Control Technology to control emissions from the proposed facilities.

§116.111(a)(2)(D) – *Federal New Source Performance Standards (NSPS), 40 CFR Part 60* – There are no New Source Performance Standards applicable to the sterile processing plant.

§116.111(a)(2)(E) – *National Emission Standards for Hazardous Air Pollutants (NESHAP), 40 CFR Part 61* – There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs, 40 CFR Part 61) that apply to the sterile processing plant.

§116.111(a)(2)(F) – *NESHAP for Source Categories, MACT Standards, 40 CFR Part 63* – The sterile processing plant is subject to MACT O, Ethylene Oxide Emissions Standards for Sterilization Facilities.

§116.111(a)(2)(G) – *Performance Demonstration* – As described in Section X.D of this application, the information provided in this application demonstrates that the proposed facilities are expected to achieve the performance specified in the application. ACS will submit any additional information required by the TCEQ to demonstrate that the represented performance will be achieved.

§116.111(a)(2)(H) – *Nonattainment Review* – This project will not be a major modification for Nonattainment New Source Review purposes. The nonattainment new source review applicability for the project is discussed in Section IX.F of this application.

§116.111(a)(2)(I) – *Prevention of Significant Deterioration (PSD) Review* – This project will not be a major modification for PSD New Source Review purposes. PSD review applicability for the project is discussed in Section IX.F of this application.

§116.111(a)(2)(J) – *Air Dispersion Modeling* – Dispersion modeling will be submitted upon request by the TCEQ.

§116.111(a)(2)(K) – *Hazardous Air Pollutants FCAA, §112(g), 40 CFR Part 63* – Since the sterile processing plant is subject to subject to MACT O, Ethylene Oxide Emissions Standards for Sterilization Facilities, §112(g) does not apply.

§116.111(a)(2)(L) – *Mass Cap and Trade Allowances* – The sterile processing plant is not subject to Chapter 101, Subchapter H, Division 3, for Mass Emissions Cap and Trade Program. There are no proposed NO_x emissions from the sterile processing plant and the Parnell Warehouse is not considered part of The Methodist Hospital Central Campus site since it is located approximately 2.5 miles from the Central Campus.

30 TAC Chapter 117 - Control of Air Pollution from Nitrogen Compounds

There are no proposed NO_x emissions from the sterile processing plant and it is not subject to Chapter 117, Subchapter B, Division 3 – Combustion Control at Major Industrial, Commercial, and Institutional Sources in Ozone Nonattainment Areas: Houston-Galveston-Brazoria Ozone Nonattainment Area Major Sources.

1.8 30 TAC Chapter 118 - Control of Air Pollution Episodes

ACS is not required to have an Emission Reduction Plan under §118.5 since the sterile processing plant does not emit 100 tons per year or more of any air contaminant.

1.9 30 TAC Chapter 122 - Federal Operating Permits

The sterile processing plant is not a major source for Title V applicability purposes and is, therefore, not required to obtain a Title V permit. MACT Subpart O, §63.360(f) provides that if you are an owner or operator of an area source subject to this subpart, you are exempt from the obligation to obtain a Title V permit, provided you are not required to obtain a Title V permit for a reason other than your status as an area source under this subpart.

The Parnell Warehouse is not considered part of The Methodist Hospital Central Campus site for Title V purposes since it is located approximately 2.5 miles from the Central Campus.

VIII.B. MEASUREMENT OF EMISSIONS

The equipment will maintain electronic logs of each ethylene oxide injection, including the quantity of ethylene oxide used. Ethylene oxide purchased and used each year will be maintained, either electronically or on paper, on a rolling 12-month record.

VIII.C. BEST AVAILABLE CONTROL TECHNOLOGY (BACT)

30 TAC Section 116.111(2)(C) requires facilities that emit contaminants to the atmosphere to use BACT. BACT is an emission limitation or equipment standard, determined on a case-by-case basis, which provides a maximum degree of emissions reduction considering technical practicability and economic reasonableness. Ethylene oxide is the pollutant affected by this project.

The TCEQ uses a three-tiered approach to evaluate the BACT proposal in NSR air permit applications. The evaluation begins at the first tier and progresses in sequence to the second and third tiers only if necessary. In each tier, BACT is evaluated on a case-by-case basis for technical practicability and economic reasonableness. The three tiers are briefly described as follows:

- Tier I. In the first tier, an applicant's BACT proposal is compared to the emission reduction performance levels accepted as BACT in recent NSR permit reviews for the same process and/or industry. The TCEQ has established Tier I BACT requirements for a number of industry types. The established BACT for Polyethylene facilities is listed below.
- Tier II. If BACT requirements have not already been established for a particular process/industry or if there are compelling technical differences between the applicant facility's process and others in the same industry, the evaluation of the BACT proposal will proceed into the second tier. A Tier II BACT evaluation involves a comparison of the applicant's BACT proposal to the emission reduction performance levels that have been accepted as BACT in recent permit reviews for similar air emission streams in a different process or industry type.
- Tier III. A BACT evaluation should proceed to the third tier only if the first two tiers of evaluation have failed to identify an emission reduction option(s) that is technically practicable and economically reasonable. A Tier III BACT evaluation involves a detailed technical and quantitative economic analysis of all emission reduction options available for the process/industry under review. While technical practicability is established through the demonstrated success of an emission reduction option based on previous use and/or an engineering evaluation of a new technology, economic reasonableness is determined by the cost-effectiveness of controlling emissions (expressed as dollars per ton of pollutant reduced) and does not consider the effect of emission reduction costs on corporate economics.

As per current TCEQ BACT Tables, Tier I BACT for ethylene oxide sterilization units is: 99.0% reduction, typically achieved with a wet scrubber, catalytic oxidizer or condenser. ACS proposes as BACT to meet 99.0% reduction using Model DR490 Safe Cell II dry bed ethylene oxide scrubbers manufactured by Advanced Air Technologies. There will be two scrubbers and each scrubber will have a blower and exhaust stack on the roof of the building. Each scrubber

AIR QUALITY PERMIT APPLICATION FOR STERILE PROCESSING FACILITY
AMERICAN CONTRACT SYSTEMS

will control emissions from three aeration chambers. Addition information on the dry bed ethylene oxide scrubbers used in this process is provided in Appendix B of this application.

VIII.D. PERFORMANCE DEMONSTRATION

ACS will operate all process and emissions control equipment according to instructions and recommendations provided by the equipment vendors and in compliance with applicable regulatory requirements and the terms of any TCEQ permit.

AIR QUALITY PERMIT APPLICATION FOR STERILE PROCESSING FACILITY
AMERICAN CONTRACT SYSTEMS

FEDERAL REGULATORY REQUIREMENTS

Zephyr Environmental Corporation

011337

IX. FEDERAL REGULATORY REQUIREMENTS
IX.A. NEW SOURCE PERFORMANCE STANDARDS

There are no New Source Performance Standards applicable to the sterile processing plant.

IX.B. NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS

There are no National Emission Standards for Hazardous Air Pollutants (40 CFR Part 61) applicable to the sterile processing plant.

IX.C. MAXIMUM ACHIEVABLE CONTROL TECHNOLOGIES FOR NESHAP SOURCE CATEGORIES

The sterile processing plant is subject to the requirements of MACT Subpart O, Ethylene Oxide Emissions Standards for Sterilization Facilities. Once the plant uses one ton or more of ethylene oxide in a consecutive 12-month period, the plant will be subject to the applicable emission standards of 40 CFR §63.362, which requires 99% emission reduction from the sterilization chamber vent and no control for the aeration room vent. The sterilization for this process occurs inside permeable bags and the bags are placed inside aeration cabinets. The aeration cabinets are under negative pressure and the ethylene oxide exiting the pack will be pulled through a vent system to one of two dry bed scrubbers which provide a 99% emissions reduction. Since there is not a sterilization "chamber" in this process, it is not clear whether 99% control requirement in 40 CFR §63.362 and the associated testing and monitoring requirements apply.

The sterile processing plant is not subject to MACT WWWW, National Emission Standards for Hospital Ethylene Oxide Sterilizers, because it is not located at a hospital.

IX.D. NONATTAINMENT PERMITTING REQUIREMENTS

The proposed project will be located in Harris County, a severe ozone nonattainment area. The existing plant does not have VOC emissions greater than 25 ton/yr and is not considered a major source for determining applicability to nonattainment review. The total proposed emissions of VOC from the project are less than 0.1 ton/yr. Therefore, nonattainment new source review is not required.

IX.E. PREVENTION OF SIGNIFICANT DETERIORATION PERMITTING REQUIREMENTS

The existing plant is not a named PSD source category and there are no emissions of criteria pollutants greater than 250 tons per year. Therefore, it is not considered a major source for determining applicability to PSD review. The total proposed emissions of VOC from the project are less than 0.1 ton/yr. Therefore, PSD review is not required.

AIR QUALITY PERMIT APPLICATION FOR STERILE PROCESSING FACILITY
AMERICAN CONTRACT SYSTEMS

PERMIT FEE INFORMATION

Zephyr Environmental Corporation

011337

AIR QUALITY PERMIT APPLICATION FOR STERILE PROCESSING FACILITY
AMERICAN CONTRACT SYSTEMS

XI. PERMIT FEE INFORMATION

As indicated on the attached Table 30 - Estimated Capital Cost and Fee Verification, a fee of \$900 is required for this permit application. ACS is remitting a permit fee of \$900 to the TCEQ Cashier's Office. A copy of the check is included in this application.



Table 30

Estimated Capital Cost and Fee Verification

Include estimated cost of the equipment and services that would normally be capitalized according to standard and generally accepted corporate financing and accounting procedures. Tables, checklists, and guidance documents pertaining to air quality permits are available from the Texas Commission on Environmental Quality, Air Permits Division Web site at www.tnrcc.state.tx.us/permitting/airperm.

I DIRECT COSTS [30 TAC § 116.141(c)(1)]	Estimated Capital Cost
A. A process and control equipment not previously owned by the applicant and not currently authorized under this chapter	\$
B. Auxiliary equipment, including exhaust hoods, ducting, fans, pumps, piping, conveyors, stacks, storage tanks, waste disposal facilities, and air pollution control equipment specifically needed to meet permit and regulation requirements	\$
C. Freight charges	\$
D. Site preparation, including demolition, construction of fences, outdoor lighting, road and parking areas	\$
E. Installation, including foundations, erection of supporting structures, enclosures or weather protection, insulation and painting, utilities and connections, process integration, and process control equipment	\$
F. Auxiliary buildings, including materials storage, employee facilities, and changes to existing structures	\$
G. Ambient air monitoring network	\$
II INDIRECT COSTS [30 TAC § 116.141(c)(2)]	Estimated Capital Cost
A. Final engineering design and supervision, and administrative overhead	\$
B. Construction expense, including construction liaison, securing local building permits, insurance, temporary construction facilities, and construction clean-up	\$
C. Contractor's fee and overhead	\$
TOTAL ESTIMATED CAPITAL COST	\$ No new equipment

I certify that the total estimated capital cost of the project as defined in 30 TAC § 116.141 is equal to or less than the above figure. I further state that I have read and understand Texas Water Code § 7.179, which defines **CRIMINAL OFFENSES** for certain violations, including intentionally or knowingly making, or causing to be made, false material statements or representations.

Company Name: American Contract Systems

Company Representative Name (please print): Philip J. Fleischhacker Title: VP of Sterilization

Company Representative Signature:

Estimated Capital Cost	Permit Application Fee	PSD/Nonattainment Application Fee
Less than \$ 300,000	\$900 (minimum fee)	\$3,000 (minimum fee)
\$300,000 to \$25,000,000	0.30% of capital cost	
\$300,000 to \$ 7,500,000		1.0% of capital cost
Greater than \$ 25,000,000	\$75,000 (maximum fee)	
Greater than \$ 7,500,000		\$75,000 (maximum fee)

PERMIT APPLICATION FEE (from table above) = \$ 900

Date: 2/1/12

**AIR QUALITY PERMIT APPLICATION FOR STERILE PROCESSING FACILITY
THE METHODIST HOSPITAL**

**APPENDIX A
EMISSION CALCULATIONS**

Calculations
Sterile Processing Plant
American Contract Systems

Hourly Basis

15 EO concentration in each stack (max ppmv)
 1563 scfm, per stack (3 fans @ 521 scfm each)

15 scf EO	1563 scf	60 min	lbmole	44.1 lb EO	=	0.16 lb/hr per stack
1.00E+06 scf exhaust	min	hr	385.5 scf	lbmole EO		

Annual Basis

The sterilizer consists of six aeration cabinets, with three cabinets vented to each scrubber

Total annual EO usage for sterilizer unit	3000 lbs
Total EO Throughput per scrubber and per stack	1500 lbs
Control Efficiency	0.99

1500 lbs EO	(1 - 0.99) control	ton	=	0.008 tons/yr per stack
stack-yr		2000 lbs		

**AIR QUALITY PERMIT APPLICATION FOR STERILE PROCESSING FACILITY
THE METHODIST HOSPITAL**

**APPENDIX B
BACT SUPPORT DOCUMENTS**



Advanced Air Technologies, Inc.
Air Pollution Control Systems

**Air Pollution Control Systems
For A Safe Environment**

Call Toll Free: 1-800-295-6583



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- Fume Scrubbers
- HCl Scrubbers
- NOx Scrubbers
- Odor Control Scrubbers
- Packed Tower Scrubbers
- Particulate Scrubbers
- Venturi Scrubbers
- Wafer Scrubbers
- Wet Scrubbers

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- Applications Guide
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Ethylene Oxide Industrial & Commercial Scrubbers

GET A QUOTE »

Advanced Air Technologies offers a combination of scrubbing equipment to accomplish ethylene oxide (EtO, EO) and propylene oxide (PO) abatement regulation for industrial and commercial applications. Combining the Orion Series™ Epoxide Scrubber and the Safe-Cell II 490A Dry bed proprietary process tackles all of your abatement requirements. Some of our installed systems operate at over 50,000 cubic feet of airflow per minute on a continuous basis. The Safe-Cell Series™ offers more than 99.9% efficiency with a safety record that is unparalleled compared to thermal oxidation.

Epoxide Scrubbers, EtO, EO, PO Scrubbers

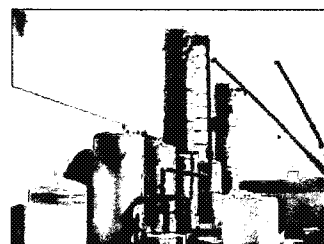
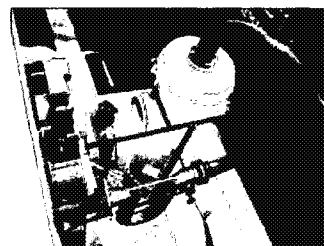
No other air scrubber supplier can match the experience of AAT in the design and operation of epoxide scrubber systems. AAT has been building ethylene oxide (EO or EtO) and propylene oxide (PO) abatement systems since 1987 and we understand the intricate design considerations that are unique to this application.

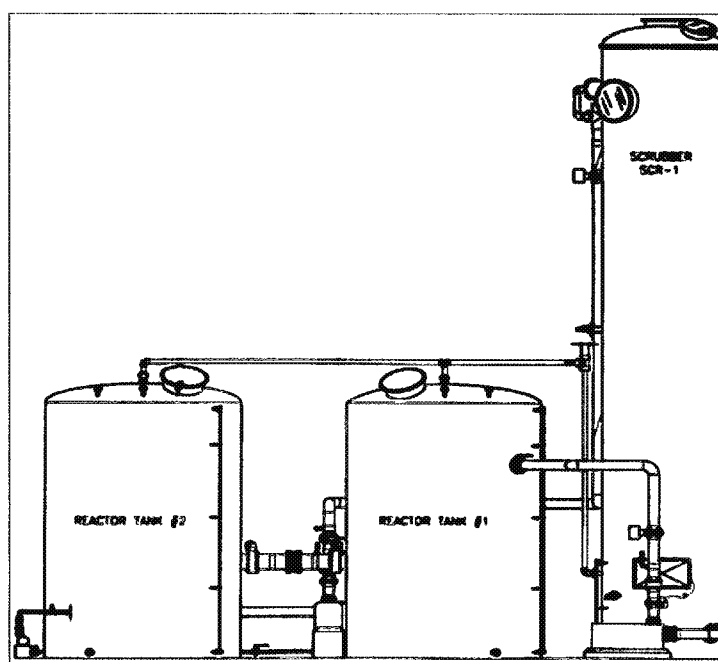
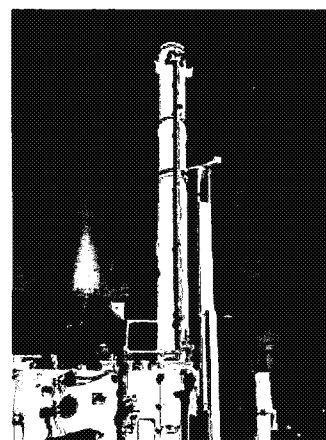
Our Orion Series™ EO / PO scrubber systems are tailored to your detailed specifications and plant characteristics. Our design flexibility allows the use of preferred components and materials, ensuring that our system can be fully and safely integrated into your existing plant environment and methodologies.

The technology used in our epoxide scrubber systems is the safest of all technologies available. We guarantee compliance to all federal, state and local emissions requirements. Entrust the safety of your plant and your personnel to a manufacturer with extensive epoxide scrubbing experience.

Typical Industry Applications

- Chemical Reactors
- Contract Sterilization Facilities
- Spice and Food Processing
- Pharmaceutical Processes
- Storage Tank Venting





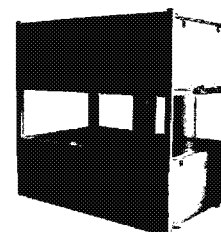
Safe Cell II Model DR-490A

Dry Bed Ethylene Oxide Air Scrubbers

The Safe Cell II is a proprietary high-volume dry bed filter used to safely destroy EtO leaving no hazardous or toxic by-products. The key to the process is our patented chemical reactant material that destroys the EtO. The spent reactant may be easily disposed in non-hazardous landfills. Check with your local waste management company

Features and Benefits

- No Hazardous By-Products
- No Water or Drains Required
- All Stainless Steel Construction
- No High-Temperature Duct
- Safest Available Technology
- Room Temperature Operation
- Industry Proven



- Performance Guaranteed

Model DR-490A

Purchase a Safe-Cell II Model DR-490A System and eliminate Ethylene Oxide (EtO) emissions from your facility. Applications include backvents, aeration room exhausts, door hoods, and other fugitive emissions. Another common use for the DR-490A is a polisher following our Orion Series™ EO/PO scrubber systems. We guarantee compliance with state and federal NESHAP regulations.

*Specifications **

- Air Flow Rate: Up to 2000 CFM
- EtO Concentration: 1-100 ppm (Typical), Up to 5000 ppm (Intermittent)
- Removal Efficiency: Up To 99.9+ %
- EtO Removal Capacity: Minimum 360 lbs. of EtO @ 99.9+ %
- Material Of Construction: Stainless Steel
- Operating Weight: 2300 lbs.

Standard Equipment Package

- DR-490A
- Exhaust Fan
- Reactant Change-Out Kit

Options

- Exhaust Fan Motor Starter
- Maintenance Contract
- Start-Up Service

Features

- Proven Performance, Guaranteed
- Multiple Units Up To 50,000 CFM
- Safe, Passive Room Temperature Operation
- Low Maintenance
- Minimal Energy Costs
- Stainless Steel Construction

Product Diagrams

- [Ethylene Oxide Air Scrubber DR490 \(Showing Front Elevation\) - PDF](#)
- [Ethylene Oxide Air Scrubber DR490A \(Showing Service Allowance\) - PDF](#)



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CERTIFIED : ISO 9001 : 2008 COMPANY VIEW CERTIFICATE

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[Ethylene Oxide \(EtO or EO\) Scrubbers](#) | [Hospital Scrubbers](#) | [Industrial Scrubbers](#) | [Engineering & Fabrication](#) | [Used Equipment](#)

TCEQ MECHANICAL SOURCES CURRENT BEST AVAILABLE CONTROL TECHNOLOGY (BACT) GUIDELINES

ETHYLENE OXIDE STERILIZATION UNITS (MACT 40 CFR 63, Subpart O)

This information is maintained by the Mechanical/Agricultural/Construction NSR Section and is subject to change. Last update 11/2006

Year	Source Type	Pollutant	Minimum Acceptable Control	Details
2006	Sterilizers / ETO	ETO	99.0% reduction	Typically wet scrubber, catalytic oxidizer or condenser. Required to meet MACT 40 CFR 63, Subpart O.



TCEQ Use Only

TCEQ Core Data Form

For detailed instructions regarding completion of this form, please read the Core Data Form Instructions or call 512-239-5175.

SECTION I: General Information

1. Reason for Submission (If other is checked please describe in space provided)	
<input checked="" type="checkbox"/> New Permit, Registration or Authorization (Core Data Form should be submitted with the program application)	
<input type="checkbox"/> Renewal (Core Data Form should be submitted with the renewal form)	<input type="checkbox"/> Other
2. Attachments Describe Any Attachments: (ex. Title V Application, Waste Transporter Application, etc.)	
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Air Permit Application	
3. Customer Reference Number (if issued)	4. Regulated Entity Reference Number (if issued)
CN	RN

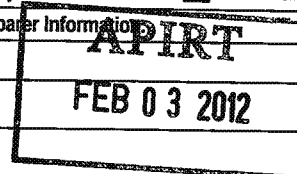
Follow this link to search
for CN or RN numbers in
Central Registry**

SECTION II: Customer Information

5. Effective Date for Customer Information Updates (mm/dd/yyyy)	
6. Customer Role (Proposed or Actual) - as it relates to the Regulated Entity listed on this form. Please check only <u>one</u> of the following:	
<input type="checkbox"/> Owner	<input type="checkbox"/> Operator
<input type="checkbox"/> Occupational Licensee	<input type="checkbox"/> Responsible Party
<input checked="" type="checkbox"/> Owner & Operator	<input type="checkbox"/> Voluntary Cleanup Applicant
<input type="checkbox"/> Other: _____	
7. General Customer Information	
<input checked="" type="checkbox"/> New Customer	<input type="checkbox"/> Update to Customer Information
<input type="checkbox"/> Change in Legal Name (Verifiable with the Texas Secretary of State)	<input type="checkbox"/> Change in Regulated Entity Ownership
<input type="checkbox"/> No Change**	
**If "No Change" and Section I is complete, skip to Section III - Regulated Entity Information.	
8. Type of Customer:	
<input checked="" type="checkbox"/> Corporation	<input type="checkbox"/> Individual
<input type="checkbox"/> City Government	<input type="checkbox"/> County Government
<input type="checkbox"/> Other Government	<input type="checkbox"/> General Partnership
<input type="checkbox"/> Federal Government	<input type="checkbox"/> Limited Partnership
<input type="checkbox"/> Sole Proprietorship- D.B.A.	<input type="checkbox"/> State Government
<input type="checkbox"/> Other: _____	
9. Customer Legal Name (If an individual, print last name first: ex: Doe, John)	
American Contract Systems, Inc.	
If new Customer, enter previous Customer below	
End Date:	
10. Mailing Address:	
4801 West 81st Street, Suite 110	
City	Bloomington
State	MN
ZIP	55437
ZIP + 4	
11. Country Mailing Information (if outside USA)	
12. E-Mail Address (if applicable)	
pfleischhacker@amconsys.com	
13. Telephone Number	
(952) 926-3515	
14. Extension or Code	
15. Fax Number (if applicable)	
(952) 926-2073	
16. Federal Tax ID (9 digits)	
411816299	
17. TX State Franchise Tax ID (11 digits)	
32041862528	
18. DUNS Number (if applicable)	
010334675	
19. TX SOS Filing Number (if applicable)	
0801269981	
20. Number of Employees	
<input type="checkbox"/> 0-20 <input type="checkbox"/> 21-100 <input checked="" type="checkbox"/> 101-250 <input type="checkbox"/> 251-500 <input type="checkbox"/> 501 and higher	
21. Independently Owned and Operated?	
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	

SECTION III: Regulated Entity Information

22. General Regulated Entity Information (If "New Regulated Entity" is selected below this form should be accompanied by a permit application)	
<input checked="" type="checkbox"/> New Regulated Entity <input type="checkbox"/> Update to Regulated Entity Name <input type="checkbox"/> Update to Regulated Entity Information <input type="checkbox"/> No Change** (See below)	
**If "NO CHANGE" is checked and Section I is complete, skip to Section IV, Preparation Information	
23. Regulated Entity Name (name of the site where the regulated action is taking place)	
Distribution Warehouse Sterilizer	



24. Street Address of the Regulated Entity: (No P.O. Boxes)	7702 Parnell Street						
	City	Houston	State	TX	ZIP	77021	ZIP + 4
25. Mailing Address:	4801 West 81st Street, Suite 110						
	City	Bloomington	State	MN	ZIP	55437	ZIP + 4
26. E-Mail Address:	pfleischhacker@amconsys.com						
27. Telephone Number	28. Extension or Code		29. Fax Number (if applicable)				
(952) 926-3515			(952) 926-2073				
30. Primary SIC Code (4 digits)	31. Secondary SIC Code (4 digits)	32. Primary NAICS Code (5 or 6 digits)		33. Secondary NAICS Code (5 or 6 digits)			
7389		561910					
34. What is the Primary Business of this entity? (Please do not repeat the SIC or NAICS description.)							
Sterilization and packaging of medical supplies							

Questions 34 - 37 address geographic location. Please refer to the instructions for applicability.

35. Description to Physical Location:	NA				
36. Nearest City	County	State	Nearest ZIP Code		
Houston	Harris	TX	77021		
37. Latitude (N) In Decimal:	29.67912		38. Longitude (W) In Decimal:	-95.37582	
Degrees	Minutes	Seconds	Degrees	Minutes	Seconds
29	49	45	95	22	33

39. TCEQ Programs and ID Numbers Check all Programs and write in the permits/registration numbers that will be affected by the updates submitted on this form or the updates may not be made. If your Program is not listed, check other and write it in. See the Core Data Form instructions for additional guidance.

<input type="checkbox"/> Dam Safety	<input type="checkbox"/> Districts	<input type="checkbox"/> Edwards Aquifer	<input type="checkbox"/> Industrial Hazardous Waste	<input type="checkbox"/> Municipal Solid Waste
<input checked="" type="checkbox"/> New Source Review - Air	<input type="checkbox"/> OSSF	<input type="checkbox"/> Petroleum Storage Tank	<input type="checkbox"/> PWS	<input type="checkbox"/> Sludge
<input type="checkbox"/> Stormwater	<input type="checkbox"/> Title V - Air	<input type="checkbox"/> Tires	<input type="checkbox"/> Used Oil	<input type="checkbox"/> Utilities
<input type="checkbox"/> Voluntary Cleanup	<input type="checkbox"/> Waste Water	<input type="checkbox"/> Wastewater Agriculture	<input type="checkbox"/> Water Rights	<input type="checkbox"/> Other:

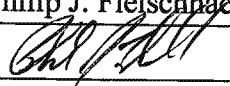
SECTION IV: Preparer Information

40. Name:	Larry Moon, P.E.	41. Title:	Principal
42. Telephone Number	43. Ext./Code	44. Fax Number	45. E-Mail Address
(512) 879-6619		(512) 329-8253	lmoon@zephyrenv.com

SECTION V: Authorized Signature

46. By my signature below, I certify, to the best of my knowledge, that the information provided in this form is true and complete, and that I have signature authority to submit this form on behalf of the entity specified in Section II, Field 9 and/or as required for the updates to the ID numbers identified in field 39.

(See the Core Data Form instructions for more information on who should sign this form.)

Company:	American Contract Systems	Job Title:	VP of Sterilization
Name (In Print):	Philip J. Fleischhacker	Phone:	(952) 926-3515
Signature:		Date:	APR 11 / 12

FEB 03 2012